accident today is much smaller than it was 25 years ago; however, if an accident occurs today, the chance is that it will be more serious than an accident 25 years ago.

Table 7-1 Indiana Highway/Railroad Grade Crossing Accidents

Year	Accidents	Accidents with Injuries	<b>Accidents with Fatalities</b>
1975	660	155	55
1985	425	104	39
1990	313	85	31
1995	269	68	28
1998	195	56	22
2000	194	47	20
2001	147	44	17

In the year 2001, the percentage of accidents with injuries was 30 percent, while in 1975 it was 23 percent. In the year 2001, the percentage of fatal accidents was 12 percent, while in 1975 it was 8 percent.

The percentage of accidents occurring at highway/railroad grade crossings without active (gates and/or flashers) warning devices has had a general downward trend. In the years 2000 and 2001, the percentage was 29 percent, while in 1975 it was 39 percent. The percentage of accidents at a grade crossing with gates has been more volatile in recent years. In the years 1998, 2000, and 2001, the percentage of accidents at gated crossings was 19, 15, and 26 percent, respectively. In 1975 it was 12 percent. The higher percentage probably reflects the higher number of gated crossings in service. The majority of these accidents involve drivers attempting to go around the gates, a particularly dangerous action at crossings with multiple tracks.

In the year 2001, the top five counties in terms of accidents—Lake, Madison, St. Joseph, Marion, and Porter—had 38 percent of Indiana's highway/railroad grade crossing accidents. Lake County, with 27 accidents, had nearly as many as the other four counties combined (28). Lake County has had the highest number of highway/railroad grade crossing accidents in all years studied, and is the only county that was in the top five every year studied. This is because of the relatively high level of population and high level of railroad activity that occurs in Lake County.

### **8.0 RECOMMENDATIONS**

# 8.1 Action Plan for Funding Improvements

- 1. Continue to closely monitor the lowest-traffic-density short lines and their continued viability and to develop contingency plans where potentially necessary.
  - There are currently 12 short lines with traffic densities below 50 carloads per route mile. These short lines constitute 233 route miles and handled 6,204 carloads in the year 2001, an average of 27 carloads per route mile. These 12 railroads require \$12.1 million to achieve the capability for handling cars up to 286,000 lbs. Gross Weight on Rail.
- Where the future need is apparent, preserve to the extent possible the 1,200-mile short line network by continuing to fund track structure rehabilitation, including upgrading of track structure and bridges to accommodate carloads up to 286,000 lbs. Establish a system of priority for this investment program, utilizing data presented in the Rail Plan. Existing funding levels in the Industrial Rail Service Fund are \$1.5 million per year. Section 2.3.2 indicates that nearly \$100 million in improvements are needed for 286,000 lbs. capability. At current funding levels, it would take 66 years to address all short line needs. Increased funding of the IRSF should be considered.

## 8.2 Freight and Passenger Project Investments

3. Examine potential of diverting some truck traffic from the Indiana highway network by commencing a study of feasibility of short haul intermodal trailer/container service between Louisville, KY, and Chicago, IL, in the I-65 corridor. The study should address the commercial structure of such a service, the preferred rail route, facility locations, alternatives to trackage rights fees, the role of Hoosier Lift intermodal terminal at Remington, IN, interline connections, and a capital program for route rehabilitation, including vertical clearance requirements. Coordinate this study with future plans for expanded rail passenger service to determine where the investment creates the most synergy for both freight and passenger service in Indiana.

# 8.3 Safety

- 4. Enhance safety at rail-highway at-grade crossings by continuing and expanding the existing at-grade crossing closure program, using the closure criteria found in 105 IAC 5-10. For those areas having numerous highway/rail at-grade crossings, the "corridor " approach could be used. The corridor approach would study the affected highway/rail at-grade crossings as a network, and make decisions regarding closing crossings and improving remaining crossings as a coordinated highway traffic flow activity.
- 5. Evaluate the attention focused on highway/rail at grade crossings, warning devices, and associated laws provided in drivers license examinations and driver education classes (possibly through a driver survey). Generally, the public is not cognizant of a train's size, momentum, and stopping limitations because exposure to the railroad industry is much less now than in past years. The importance of obeying warning devices and the dangers of crossing railroad tracks, especially at multiple track crossings where a second train may be approaching just after a first train has passed, is as valid today as in the past.

# 8.4 Intermodal Freight and Passenger Facilities

6. Examine the potential for a public/private partnership to design and construct a new passenger station at Michigan City. Potential participants include the state, Amtrak, private concessionaires, local government, etc.

#### 8.5 Other Recommendations

- 7. Establish a regular coordination program with the Indiana Port Commission and other public port authorities to promote and facilitate intermodal interface with rail in support of Indiana industries.
- 8. Establish regular coordination with the Indiana Department of Commerce for assisting with industrial development issues that affect rail carriers, as well as to keep informed of changing industrial trends that will affect the Indiana rail network, such as anticipating changes in grain marketing and logistics.
- 9. Continue financial and technical support of state and regional passenger rail planning activities. As funding becomes available, begin Draft Environmental Impact Statement and Preliminary Engineering necessary to construct the Midwest Regional Rail System in Indiana.
- 10. Review on-time performance of Amtrak service in Indiana to determine extent to which inadequacies of rail infrastructure in Indiana is a contributing factor. On-time performance is a necessary ingredient in achieving ridership growth of existing trains and the promotion of future expansion.
- 11. Pursue aggressive public financing support for rail projects that have demonstrable benefits to the Indiana transportation system, including reductions in traffic choke points.

- enhanced safety, and improved air quality. Leverage these public investments with rail carriers to reduce historic barriers to intermodalism and thereby promote a more seamless network for both freight and passenger traffic to and through Indiana. The recently completed Alameda Corridor in southern California is a prototype of such investments.
- 12. Establish regular formal meetings with railroads, including Amtrak, shippers, and other stakeholders, such as MPOs, at least annually. Formal meetings with railroads should occur more frequently to address specific types of issues such as railroad capital plans, state investment plans, safety, and service issues. Similar coordination should be formalized with Departments of Transportation in adjacent states.